

REMARKS

Applicants have carefully reviewed the Office Action dated May 6, 2004. Applicants respectfully traverse all rejections and assertions made by the Examiner and request reconsideration of all pending claims, namely claims 1-35, in the above-referenced patent application.

As a preliminary matter, Applicants bring to the Examiner's attention that formal drawings were submitted on December 18, 2001, but there has been no indication of approval of the drawings by the Examiner or the Official Draftsman. Applicants request that the Examiner/Official Draftsman indicate approval or non-approval of the formal drawings with the next PTO communication.

Claims 1-4 and 20-23 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,944,701 to Dubrul. Applicants respectfully traverse this rejection, asserting that these claims are believed allowable over Dubrul. Claim 1 states that the polymer jacket attached to and surrounding a portion of the core wire is more stiff than the portion of the core wire. As stated in the specification (see page 4, lines 8-16), stiffness refers to conventional material characteristics and shape of materials used in mechanical engineering. In other words, the material of the polymer jacket is selected such that when the portion of the core wire surrounded by the polymer jacket is deformed into a shape within the elastic limit of the core wire, but beyond the elastic limit of the polymer jacket, the portion of the core wire retains its shape due to the retention of the polymer jacket (see page 5, lines 14-23). This allows the guidewire to be repeatedly shaped without compromising shapeability or guidewire performance (see page 6, lines 9-10). Dubrul teaches a guidewire having a polymer coating. However, in Dubrul the shape memory alloy of the guidewire is more stiff than the polymer coating (see column 3, lines

35-44). Thus the force of the shape memory alloy will overcome any opposing force generated by the polymer coating.

Additionally, Dubrul teaches a guidewire formed from shape memory polymers (column 3, lines 45-47), but Dubrul fails to teach a shape memory polymer jacket. It is understood from the language of Dubrul that a shape memory polymer may be substituted for the shape memory alloy of the guidewire. Thus, the shape memory material of Dubrul is located in the core material. However, this is not what is claimed in claim 1. Claim 1 states a shape memory polymer jacket attached to and surrounding a core wire comprising metal. Therefore, Applicants respectfully assert Dubrul fails to teach a guidewire comprising a core wire and a shape memory polymer jacket surrounding at least a portion of the core wire, wherein the polymer jacket is more stiff than the portion of the core wire.

Claim 1 is believed to be allowable for the above reasons. Claims 2-16 depend from claim 1 and add significant additional elements not taught in the prior art. Reexamination of claim 1 and all subsequent depending claims is respectfully requested.

Claim 20 states a guidewire comprising an elongate core wire and a polymer jacket attached to and surrounding a distal tip of the core wire. As in claim 1, the polymer jacket is more stiff than the distal tip portion of the core wire which it surrounds. For the same reasons as stated above concerning the allowability of claim 1, Applicants respectfully assert that Dubrul fails to teach a guidewire having a polymer jacket more stiff than the distal tip portion of the core wire which it surrounds. Applicants respectfully assert that claim 20 is in condition for allowance and reexamination is requested. Claims 21-35 depend from claim 20 and add significant additional elements to distinguish them further from the prior art. Therefore, they are also believed to be in condition for allowance.

Claim 17 is rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. patent No. 5,944,701 to Dubrul in view of WO 01/07499 to Gunatillake et al. Applicants respectfully traverse this rejection. Dubrul teaches a guidewire formed from a shape memory alloy, such that the guidewire has a predetermined shape, namely a coil, at room temperature and a relaxed, straight shape at body temperature (see column 3, lines 11-15). However, as stated above, Dubrul fails to teach a shape memory polymer jacket attached to and surrounding a portion of the core wire. As stated in claim 17, it is the heating and cooling of the shape memory polymer jacket that provides the shapeability of the guidewire. Therefore, the shape memory polymer attached to and surrounded by the portion of the core wire may be repeatedly shaped without compromising the shapeability or guidewire performance. The teachings of Gunatillake et al. fail to suggest at least this element of the current invention as stated in claim 17. MPEP §2143.03 states that to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested. Because neither Dubrul nor Gunatillake et al. teach a shape memory polymer jacket attached to and surrounding a portion of a core wire, claim 17 is believed to be in condition for allowance.

Claims 17-19 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,944,701 to Dubrul in view of U.S. Patent No. 5,662,621 to Lafontaine. For similar reasons as stated above, Applicants traverse this rejection. Neither Dubrul nor Lafontaine teach a shape memory polymer jacket attached to and surrounding a portion of a core wire. As discussed in a prior response dated January 30, 2004, Lafontaine teaches a guide catheter with shape memory retention. The core 24 taught in Lafontaine is not a core wire as in the present invention. Lafontaine fails to teach a shape memory jacket attached to and surrounding a core wire and treating the catheter shaft 22 as a polymer jacket attached to and surrounding the core

wire would render the Lafontaine invention nonfunctional. Because neither Dubrul nor Lafontaine teach at least one element of the claimed invention, Applicants believe claim 17 is in condition for allowance. Claims 18 and 19 depend from claim 17 and add significant additional elements. Therefore, they are also believed to be in condition for allowance.

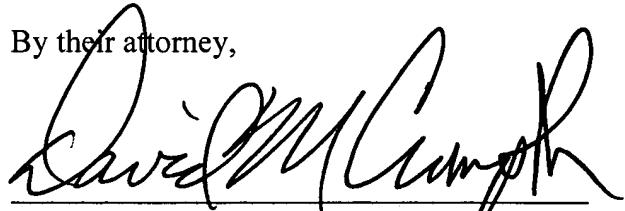
Claims 5-16 and 24-35 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,944,701 to Dubrul in view of U.S. Patent No. 6,485,458 to Takahashi. Claims 5-16 depend from claim 1 and claims 24-35 depend from claim 20. Therefore, for the reasons stated above concerning the allowability of claims 1 and 20 Applicants respectfully assert that this rejection is moot.

Reexamination and reconsideration are respectfully requested. It is respectfully submitted that all pending claims are now in condition for allowance. Issuance of a Notice of Allowance in due course is requested. If a telephone conference may be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,

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By their attorney,



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